DESIGN BRIEFING SYSTEM
NOTEBOOK

DBS 29

MC0317

Accommodation for Pharmaceutical Services

DEPARTMENT OF HEALTH AND SOCIAL SECURITY
WELSH OFFICE

for committee/project team use

Introduction

1. The preparation of design briefs for health buildings can be simplified by using a briefing aid produced by the Department of Health. Called Design Briefing System (DBS), it is published in notebook form with each new Health Building Note (HBN). DBS helps project teams to identify user requirements in a logical well-considered manner.

2. What DBS provides

The system adopts a disciplined check list approach, identifying the planning decisions which need to be made by the project team. The format of DBS is as follows: a portion of the text of the associated HBN is reproduced on the left hand page. On the facing right hand page, a sequence of options implied by the text are set out in such a way that they may easily be marked for acceptance, modification or rejection. The use of DBS ensures that, for example—

- in a sequence of decisions, none is overlooked; other options may be added if necessary;
- earlier decisions are identified so that they may easily be recaptured when associated topics are under consideration;
- during refinement of the brief, the implications of modifications which may affect and therefore prompt reconsideration of earlier decisions, may easily be checked;
- members of the team can review the questions next due for consideration and thus ensure that they are fully informed before the meeting; this has been found to be of great organisational and psychological benefit;
- members of the project team can make their own record of decisions in the document itself mostly by ticking options, or entering additional text in the appropriate place. This means that there is a clear, up to date record of agreed decisions which can easily be identified, as they are not embedded in a mass of minutes not of immediate relevance.

The brief is then typed directly from a Master DBS document, supplemented where necessary with information from project team minutes.

3. Using DBS encourages project teams to consider the compatibility of decisions in a systematic and logical manner, thereby preparing a brief containing adequate detail of the user requirements. This should help to improve those areas in which some past designs have been deficient. For example, the provision of inadequate access or space; inadequate storage facilities.

4. DBS is primarily concerned with the detailed briefing stage of a project—preparation of the client/user contribution to a comprehensive design brief. In addition to providing information to the designer, the brief is useful at the commissioning stage, and for evaluation when the building has been in use for a period.

5. The use of DBS enables client/user requirements to be stated clearly and concisely by the project team, not only in respect of accommodation, but also how that accommodation is to be used. Furthermore, as mentioned previously, during refinement of the brief, use of DBS enables a check to be made on the implications of modifications resulting from previous client/user decisions, ie it establishes a systematic data chain which can be referred to if at some subsequent stage it is necessary to trace back the reason for decisions. It must be borne in mind, however, that DBS options are not costed, and while providing the cost planner with earlier and more detailed information regarding the client/user requirements, DBS in itself does not assist in matching these with the money available.

6. DBS documents are intended to be used as an aide memoire in conjunction with the associated Health Building Note and other guidance issued by the Department, and should not be regarded as taking the place of such guidance.

HOW TO USE THIS DOCUMENT

7. Using the document effectively

There are two parts to the document. The first part requires decisions to be taken, lists the options available, and includes extracts of relevant guidance from the Health Building Note. The second part lists activity spaces (or rooms) from which a selection can be made based on decisions recorded in the first part.

8. Flexible use

Above all, the system should be used flexibly. Although the document anticipates the planning decisions which need to be considered, and carefully phrases the choices so that the design brief can be prepared directly from the document, the project team can add other decisions, options, and notes, or change the phrasing of existing ones to suit the project's requirements.

9. Distribution

A copy of this document should be given to each member of the project team well before the first meeting where it is to be used. A master copy should be held by the project team secretary to record agreed decisions from which the brief is prepared.

10. Planning the meetings

Each member of the project team should read their copy of the DBS document, and the associated Health Building Note, before the first planning meeting. This gives an overall view of the planning decisions which have to be made

and helps to place the sequence of the decisions discussed at meetings in the right context.

The document can be used also, especially by the secretary or chairman of the team, to prepare the agenda of meetings and to arrange in advance for the attendance (or at least the views to be obtained) of representatives of specialist users (eg dentists, pharmacists, domestic services manager) when a particular service is being discussed.

11. Between meetings
Individual project team members can be assigned tasks relating to specific parts of the document to consider between meetings. This feature can be used to obtain relevant information, to stimulate and focus attention on necessary fact-finding studies. It also highlights groups of decisions for members to work on, individually or in consultation with colleagues or other specialists.

12. Member's record of meetings
Each member of the project team should record in their own copy of the DBS document the decisions agreed at meeting so that;

(a) a clear, immediate record of agreed decisions is taken away from each project meeting, rather than having to wait for meeting minutes (which have not been confirmed and may not always reflect accurately the decisions made);

(b) one continuous record of up-to-date decisions is held by each team member rather than having records of decisions taken (and often revised) at various times embedded in a series of minutes (which may, in turn, be inaccurate).

13. This feature is especially important (at or outside the project meetings) when considering decisions which may have been amended by decisions made previously, and when checking that any interim or draft design brief accurately reflect the latest agreed decisions. If members are absent from a particular meeting then arrangements must be made for them to update their own DBS document.

14. Meeting minutes
Minutes need only concentrate on the background leading up to the decisions made (and recorded in the DBS document) at project team meetings. If it is decided that parts of the minutes should be included in the client brief as supporting information, a note should be made alongside the relevant parts of the minutes which are to be added to the brief.

15. Cross-referencing
This is explained in detail in paragraphs 26. It enables decisions to be cross-checked and is an important feature especially in helping to review the implications of revising decisions made at previous meetings.

16. Design brief content
The primary aim of the brief prepared from this document is to record the client/user requirements for a health building. The brief should be as unequivocal as possible to enable the design team to interpret their requirements into a design.

17. In addition, the brief will contain background information for designers and provide the basis for the commissioning and evaluation of the building. The organisational decisions included in DBS documents form an important aspect of this. The project team may decide also to include some extra background information from meeting minutes and this should be carefully noted in the Master DBS document.

18. Any brief (whether interim or complete) should be prepared directly from the Master DBS document (with supporting parts of minutes included as notes). This helps to ensure that the draft is as up-to-date and as complete as possible. It is also easier for all members of the team to check its accuracy. The draft can then be agreed and edited before issue outside the project team.

AN EXAMPLE OF PART OF A BRIEF TYPED FROM ONE PAGE OF A DBS DOCUMENT IS REPRODUCED AS AN APPENDIX

19. Preparation of Part 2
Part 1 should be complete before selecting the detailed accommodation required (activity spaces) in Part 2. The secretary or chairman of the team can use Part 2 to ensure that a thorough check is carried out of the detailed implications of planning decisions recorded in Part 1. The choice of activity spaces and data sheets in draft form can then be made by a small sub group of the planning team for subsequent ratification by the full team.

20. Use after the brief is prepared
The Master copy of this completed document should be retained (and kept up-to-date with all changes) as part of the project documentation after the design brief has been agreed, so that:

a) any subsequent changes in the brief or design which may be necessary during the project design stage can be fully checked out for their implications using the cross-referencing features of the DBS document;

b) it forms the basis for preparing operational manuals, initialising training programmes, etc during commissioning;

c) a true evaluation can be made between the completed building and the intentions recorded in the design brief.

d) when considering any future building changes, upgrading or project phases, this DBS document (together with any other DBS documents for the project) is readily available to help ensure that new planning decisions are compatible with existing accommodation that has already been planned (but not yet built).

COMPLETION OF THE DOCUMENT

It is intended that the DBS document should be used as notebook in which each project team member can record the options selected at project team meetings, in addition to any other relevant background notes or information.

21. Content
The planning decisions in this document are structured as follows:

a) **General Philosophy and Considerations**, which is a summary of general philosophy of the service provided and general points that require consideration;

b) **Scope of Service and Workload**, which sets out the scope of service provided and its workload;

c) **Locational Relationships**, with other areas of the hospital;

d) **Organisation of Service**, which sets out detailed operational policy decisions under several subheadings. Planning decisions in this section have a direct implication on one or more of the following:

(i) Design, ie affect and type and quantity of the detailed facilities to be provided;
(ii) Operational policy, ie state operational procedures or staffing decisions which can be used as a reference point for commissioning or evaluation.

e) **General Design Requirements**, which state any overriding requirements which are not specified elsewhere in the design brief.

22. Presentation of information
Except for the introductory section—General Philosophy—all sections of the DBS document contain a set of options/planning decisions (shown on the right hand pages) together with extracts of any relevant planning guidance material (shown on the left hand pages), opposite the appropriate options/decisions.

23. Guidance
The primary objective of the portions of guidance material on the left hand page is to remind the project team of the appropriate section of the Health Building Note which must be taken into account before specific options on the opposite page are selected.

24. Paragraphs of guidance dealing with cost effectiveness are highlighted in bold type, to alert the project team to the capital and running cost implications of certain decisions.

25. Planning decisions
For most planning decisions a set of possible options is shown. Some of these may be predetermined, eg because there is no alternative; compatibility with whole hospital policies. The project team select the appropriate option by ticking within the square brackets alongside. Where appropriate their choice can be quantified, or they can enter other decisions, options of further information to be included in the brief.

26. A simple referencing system is incorporated which allows cross-checking for compatibility of decisions made. The reference relates to the page No (top left-hand corner) and the "REF" column letter. For example, on page 16 of this DBS document "Pharmacy" under reference "A"—Controlled drugs will be supplied to wards and departments (a) by requisition; the unique reference for this option if selected is 16A(a), to which can be added the generic code for that DBS document "PHA", making in all PHA16A(a)

27. The reference in the "EARLIER DECISION" columns (which are already printed in the document) may be used in a number of ways:

—to check when making a decision that previous decisions are compatible;

—to check all the relevant consequences of doing so when proposing to change a decision.

1. GENERAL PHILOSOPHY

The Pharmacy will provide a comprehensive service for all categories of patients cared for in a District Hospital. It is a scientific and technical service subject to rapid and radical advances which cannot be readily forecast and it will necessarily cover a wider range of activities than the dispensing and distribution of drugs. These activities will include a limited preparation service, security in storage and transport and an advisory service, the latter being particularly important in relation to new pharmaceutical preparations.

A. The Pharmacy department will provide a service for receipt, storage and preparation of pharmaceuticals for distribution to:
   a) Wards
   b) Clinical departments
   c) Out-patients attending pharmacy
   d) Health clinics.

B. In addition, the pharmacist provides an advisory service for medical staff and may participate in clinical decisions as a member of the ward team.

C. The pharmacist also has a responsibility in the specification and quality of surgical dressings. Similarly, quality control of medical gasses purchased by Supplies Department should be the responsibility of the pharmacist.

From the point of view of pre-packing it may be economically advantageous to use commercial sources for the supply of drugs and production activities in the Pharmacy will be affected by the reliability and availability of commercial supplies.

The training of personnel will be an additional important function of the Pharmacy.

2. SCOPE OF SERVICE AND WORKLOAD

ORGANISATION

The organisation of hospital pharmaceutical services has undergone fundamental changes in the past decade. These changes have been brought about following the publication of the Report of the Working Party on the Hospital Pharmaceutical Services (Noel Hall Report, 1970), and the implementation of the Medicines Act 1968 in terms of applying its provision to hospitals.

The current picture of the pharmaceutical service is that of a service provided at individual hospital level by a hospital-based primary service department either in that hospital, if it is of reasonable size, or by a department in a nearby hospital for smaller units. Within the pharmaceutical area, set up under the Noel Hall arrangements, several of these hospital departments are supported by a more specialised manufacturing and associated quality control service (not necessarily attached to any primary service department). A specialist drug information centre may also be associated with one of the group of primary service departments. Although the numbers of staff employed in a typical pharmaceutical area cannot be given with precision, accommodation requirements are determined by storage considerations and by the nature and extent of the equipment used, particularly in such areasas manufacturing. (HBN, 1.5) See HBN Figures 2 and 6 for intra-pharmacy relationships.

Manufacturing services

Manufacturing services (manufacture and assembly) have been evolving from the intimate connection with primary services towards a larger scale of operation, perhaps covering more than one pharmaceutical area. The Department's policy on manufacturing is given in health circular HC(84)3, - "Manufacture of products in the NHS". (Appendix II). The policy is that manufacturing activities of health authorities should only be undertaken if:

i. there is no satisfactory commercial source, or

ii. it is significantly more economical to do so.

Where manufacturing is carried out it is essential that the full cost of the operation be established not only for internal information and to determine realistic prices for inter-authority transactions, but also to ensure proper comparisons with outside prices where appropriate. For this purpose, memorandum manufacturing accounts and profits and loss accounts should be prepared covering not only direct manufacturing costs but also overheads, cost of capital, back-up services, documentation, etc. Authorities should monitor the results of costing and take appropriate action. Detailed guidance is given in the Appendix to the Circular. Arrangements will be subject to examination by statutory auditors in the usual way. (HBN para 2.7.)

Earlier decision	Ref	SCOPE OF SERVICE AND WORKLOAD
	A	Primary services to be provided by the pharmacy for the hospital and peripheral units will include: (a) the receipt of pharmaceutical products [ ] (b) secure storage of classified and other drugs [ ] (c) prescription dispensing [ ] (d) the purchase and holding of supplies for peripheral units [ ] (e) the distribution of pharmaceutical supplies to out-patients, clinical departments, wards, peripheral units and health clinics [ ] (f) the training of pharmaceutical staff [ ] (g)
	B	The support functions located at this hospital will be: (a) bulk preparation of sterile fluids, topical water, etc. [ ] (b) bulk manufacturing [ ] (c) bulk prepacking [ ] (d) bulk stores [ ] (e) quality control [ ] (f) information services on an area basis [ ] (g) headquarters organisation of an area service [ ] (h) provision of radio-pharmaceutical preparations [ ] (i)
	C	The pharmacist will also be responsible for: (a) an advisory service, particularly on new preparations [ ] (b) information and advice to medical and nursing staff [ ] (c) participating in clinical decisions as a member of ward team [ ] (d) the specification and quality of surgical dressings [ ] (e) quality control of locally prepared and dispensed items [ ] (f) quality control of medical gases [ ] (g)
	D	Local policy also requires the pharmacy to stock and supply: (a) medical gas cylinders [ ] (b) dressings (non-medicated) [ ] (c) surgical sundries [ ] (d)

2. SCOPE OF SERVICE AND WORKLOAD (contd)

WORKLOAD

The workload of the dispensing section may be divided into three parts:
(a) In-patient services;
(b) Out-patient sessions;
(c) Health clinics.
The workload on the Pharmacy department generated by the out-patient sessions is likely to vary significantly according to the type of sessions.

The area pharmaceutical service will normally be organised to serve 4,000 to 6,000 beds of all types. For geographical reasons however an area with as few beds as 2,500 beds of all types might be accepted. It is envisaged that an area service would be related to a population catchment area ranging from 450,000-600,000 - but in exceptional cases it may be necessary to relate the service to a population as small as 280,000. The restructuring of the health services into districts may distort these arrangements.

A district general hospital pharmacy serving the main hospital and its peripheral units might be expected to serve a total of around 1,200 beds.

Earlier decision | Ref

2. SCOPE OF SERVICE AND WORKLOAD (contd)

A The estimated number of beds serviced by the hospital pharmacy will be: (SPECIFY NUMBERS)

(a) main hospital _____

(b) peripheral units _____

TOTAL: _____

B The estimated number of out-patient sessions served by the hospital pharmacy will be: (SPECIFY NUMBERS)

(a) main hospital _____

(b) peripheral units _____

TOTAL: _____

C The estimated population of the catchment area(s) will be: (SPECIFY)

(a) district hospital level _____

(b) area/regional level _____

TOTAL: _____

D The estimated number of health clinics served will be: (SPECIFY)

(a) centres running family planning clinics _____

(b) other centres _____

TOTAL: _____

2. SCOPE OF SERVICE AND WORKLOAD (contd)

SEPARATE PHARMACY UNITS

Peripheral hospitals having a number of wards or departments may justify a small pharmacy unit from which prescriptions for in-patients or out-patients may be dispensed and issues made of other pharmaceutical items. The pharmacy unit would be in the charge of a pharmacist but the full-time attendance of the pharmacist may not be essential and demands for unusual items or emergency dispensing would be met by use of transport between the peripheral unit and the district general hospital.

VISITING PHARMACIST BASE

Any hospitals which are serviced from a pharmacy elsewhere may need to provide a base for the visiting pharmacist(s). Whether or not this takes the form of a separate lockable room, it will have to comprise office accommodation for his sole use with secure storage for the ward stock records and a small range of standard reference books. No medicinal products need to be kept here, but an adjacent site for the hospital's emergency drug store might be advantageous. Transmission of prescription details to the pharmacy could be by such means as a facsimile transfer system or computer terminal.

Earlier decision | Ref

2. SCOPE OF SERVICE AND WORKLOAD (contd)

A The pharmacy will provide a service:
(a) 24 hours a day [ ]
(b) during normal working hours [ ]
(c)

(d) 7 days a week [ ]
(e)

(f) with an emergency service available out of normal hours [ ]
(g)

B A small separate pharmacy unit will be required in the following areas: (SPECIFY)

(a) _____

(b) _____

C A visiting ward pharmacist base will be required in the following peripheral units: (SPECIFY)

(a) _____

(b) _____

(c) _____

3. LOCATIONAL RELATIONSHIPS WITH OTHER AREAS OF THE HOSPITAL

Earlier decision	Ref	3. LOCATIONAL RELATIONSHIPS WITH OTHER AREAS OF THE HOSPITAL
2A	A	Functionally the Pharmacy is a supply department and as such it may coalesce with other supply departments to form part of a main supply function. Advantage may be taken of using a common reception and distribution area for handling non-specialist supplies and for the external distribution of supplies to peripheral units. [ ]
	B	The dispensary area should be related to the Out-patients' Department circulation pattern to avoid the need for a detached out-patients' dispensary [ ]
	C	The order of priority for planning the Department near other areas of the hospital is: (INDICATE PRIORITY IN NUMERICAL ORDER)
		(a) the out-patients' department [ ]
		(b) the in-patients' accommodation [ ]
2A		(c) external access (main goods receiving area) [ ]
		(d) the main hospital corridor [ ]
2A		(e) the central stores [ ]
		(f) the central flammable store [ ]
		(g)

4. ORGANISATION OF SERVICE 4.1 MAIN DISPENSARY

SERVICE AREAS

The service area for out-patients and ward staff may be designed to be adjacent to each other in that the service required by each can be met jointly by the pharmacy staff. The design should be such as to avoid any impression of queue jumping by ward staff collecting urgent prescriptions. Patients may be in wheelchairs and accompanied by escorts.

PRESCRIPTION CHARGES

Collection of charges for prescriptions and advice to out-patients on their rights to exemption should not be the responsibility of the Pharmacist, but rather an administrative function of the hospital.

It may be convenient to accommodate the prescription clerk in the waiting area so that patients may be advised of their rights while waiting for prescriptions to be dispensed.

Earlier decision | Ref

4. ORGANISATION OF SERVICE 4.1 MAIN DISPENSARY

A The entrance to the department will be:
(a) adjacent to the out-patients department waiting area [ ]
(b)

B The main dispensary will require:
(a) a supervised entrance [ ]
(b) a reception area [ ]
(c) separate service counters for out-patients and staff [ ]
(d) a divided service counter for out-patients and staff [ ]
(e)

C Waiting facilities for patients and staff collecting prescriptions will be required:
(a) in separate, adjacent areas [ ]
(b) combined in one area [ ]
(c) in part of the out-patients waiting area [ ]
(d)

D Out-patients prescriptions will be issued:
(a) on presentation of a signed prescription at the service counter [ ]
(b) by routine issue for certain clinic patients from pre-packed labelled stock [ ]
(c)

E The collection of prescription charges will be made:
(a) by a prescription clerk [ ]
(b) by a stamp machine system [ ]
(c)

F And this will be in:
(a) the out-patient department waiting area [ ]
(b) the pharmacy waiting area [ ]
(c)

G Advice to patients on exemption from charges will be given:
(a) by the prescription clerk [ ]
(b)

4.1 MAIN DISPENSARY

PATIENT-PHARMACIST DISCUSSIONS

The division of the out-patient counter in bays can assist privacy, although a separate cubical facility may be worth considering for longer discussions with patients.

DISPENSING AND THE SUPPLY OF WARD STOCKS

Dispensing covers a range of techniques where stocks of drugs or raw materials or both are manipulated to produce a medicine which fulfils the prescribed requirements for an individual patient. Not every item supplied within the hospital needs to undergo manipulation, however, since certain medicines are already presented in a form suitable for issue as ward stocks. Drug distribution in hospitals is discussed in a report by the Department's Operational Research Service. (HBN, para.2.2)

Earlier decision | Ref

4.1 MAIN DISPENSARY (contd.)

A Advice to out-patients on the administration and use of medicines will be available:
(a) in the pharmacy reception area [ ]
(b) in the pharmacy reception area within a separate cubicle for privacy [ ]
(c) in day hospitals (given by a visiting pharmacist) [ ]
(d)

B Drugs issued locally on a routine basis (for clinics) will be stored:
(a) in the main dispensary [ ]
(b) in the department where the clinic is held [ ]
(c)

C Clinics who may issue drugs on a routine basis include:
(a) ante-natal [ ]
(b) family planning [ ]
(c)

D In-patients urgent prescriptions will be:
(a) collected by ward staff [ ]
(b)

E Pharmacy items for day hospitals will be delivered:
(a) following the routine for in-patients [ ]
(b)

F Day patients requiring supplies for nights or weekends will:
(a) be regarded as in-patients discharged with emergency supplies [ ]
(b)

G Supplies of pharmacy items for day patients use outside the hospital will be:
(a) dispensed in the pharmacy and delivered to the day hospital [ ]
(b) dispensed in the pharmacy and given to the patient [ ]
(c)

4.1 MAIN DISPENSARY

HAZARDOUS SUBSTANCES

A certain group of preparations ,e.g. those with alcohol bases or irritant ingredients, present a hazard to staff in dispensing. A separate bench area must therefor be provided and equipped with fume hood extractor, or some other means of rendering the atmosphere innocuous. (HBN para 4.17)

PACKAGING

It may be assumed that increasing use will be made of pre-packed products. Special formulations which cannot be supplied from the area bulk preparation service may be prepared in the dispensary.

Earlier decision	Ref	4.1 MAIN DISPENSARY (contd.)
4A	A	Emergency prescriptions will be made available outside normal hours by: (a) a resident pharmacist [ ] (b) a pharmacist 'on call' system [ ] (c) using emergency cupboard(s) [ ] (d)
4A	B	Emergency cupboard(s) will be sited: (a) in the reception area of the pharmacy [ ] (b)
	C	Emergency cupboard(s) will be: (a) checked daily by a pharmacist [ ] (b)
	D	Facilities will be required in the working areas of the main dispensary for: (a) general dispensing [ ] (b) extemporaneous dispensing [ ] (c) preparation of small quantities of special formulations [ ] (d) preparation of toxic or hazardous materials [ ] (e) administration and record keeping [ ] (f) security of controlled drugs [ ] (g) refrigerated storage [ ] (h) packaging [ ] (i) ward pharmacist's work [ ] (j) stockholding of quantities of drugs in broken bulk packs [ ] (k) stockholding of quantities of drugs in small quantity packs [ ] (l) stockholding of fluids, antiseptics, and lotions [ ] (m)
	E	Adjacent facilities will be required for: (a) cleansing containers [ ] (b) in-process control [ ] (c)

4.2 STERILE DISPENSING SUITE

STERILE DISPENSING SUITE

The function of a sterile dispensing suite is to prepare sterile products on a small scale only. This should be limited to specialised requirements needed at the District Hospital or any of its peripheral units, but include items prepared aseptically for individual patients.

Workload may be variable in nature and may also vary depending on the particular specialities undertaken at the main units served.

The sterile dispensing suite should not undertake the manufacture of any product required in such a volume that it may be economically undertaken on an area basis or commercially.

CYTOTOXIC DRUG DISPENSING

The pharmacy may undertake the preparation of cytotoxic agents for individual patients. The facilities required for these operations are currently the subject of professional debate, but it seems likely that a 'microbiological safety cabinet' would be required, complying with Class II of BS 5726 with downward airflow and located in an aseptic area. The airflow in the cabinet should comply with Class 1 of BS 5295. Certain cabinets, refined further for use with cytotoxic agents, have recently been introduced in this country. The Health and Safety Executive have issued a Guidance Note (MS 21) suggesting precautions for the safe handling of cytotoxic drugs, to which those planning setting up a cytotoxic preparation service are advised to consult. (HBN, para. 4 .18)

Earlier decision | Ref

4.2 STERILE DISPENSING SUITE

A The sterile dispensing suite will be required to prepare and dispense sterile items for:
(a) the hospital in which it is situated [ ]
(b) peripheral hospitals [ ]
(c) all hospitals in the district [ ]
(d)

B Access/egress will be required to and from the sterile dispensing suite for:
(a) materials and products [ ]
(b) prescriptions [ ]
(c) staff [ ]
(d)

C The suite will be accessible:
(a) through an airlocked entrance [ ]
(b) via a hatch opening into a clean area of an associated support room [ ]
(c) via a hatch opening into a clean store room of the suite [ ]
(d)

D Staff using the sterile dispensing suite will be required to:
(a) change and scrub up before entering preparation and aseptic areas of the suite [ ]
(b)

E Facilities will be required in the suite for:
(a) an additive service [ ]
(b) a parental nutrition service [ ]
(c) producing special formulations in small quantities only [ ]
(d) preparation of cytotoxic drugs [ ]
(e)

4.2 STERILE DISPENSING SUITE (contd)

Earlier decision | Ref

4.2 STERILE DISPENSING SUITE (contd.)

A The preparation and support areas of the suite will require facilities for:
(a) the manual preparation of sterile products [ ]
(b) sterilising by hot air oven [ ]
(c) sterilising by autoclave [ ]
(d) the preparation of products requiring aseptic techniques [ ]
(e) inspection, labelling and capping [ ]
(f)

B Preparation equipment required will include:
(a) portable filtration apparatus [ ]
(b) mixing apparatus [ ]
(c) filtering equipment [ ]
(d) ampoule sealer [ ]
(e) sterilising oven [ ]
(f)

C The labelling of sterile products will be by:
(a) hand-operated machines [ ]
(b)

4.3 SUPPLY AND STORAGE

STORES

The stores section of the pharmacy provides facilities for keeping stocks of medicinal products in good condition after reception from supplies and before being issued to other sections for onward distribution to wards, departments, clinics and patients. (Figure 6) However, the control of stores stocks is assisted by measures (procedural or physical or both) which limit access by dispensary staff to these stocks. The provision of storage facilities should take into account that:

a. a growing proportion of medicinal products need to be kept in temperature controlled conditions;

b. more items are being dispensed in their original packs than from bulk stock;

c. child-resistant and unit-of-use packs require proportionately more space than other packs. (HBN, para. 4 .44)

It is recognised that not all the store sections are required in every case. Local policy will decide, for example, whether or not the pharmaceutical department will issue dressings which do not attract a product licence; and, although the pharmacist is responsible for the quality of medical gases, the cylinders may not always be stored and issued under his direct authority. A code of practice on the storage of medical, pathology and industrial gas cylinders has been issued by DHSS (1985)

SECURITY

Good security is an essential consideration because the medicinal products stored and used in a pharmacy are always at risk from attempted thefts. The Misuse of Drugs (Safe Custody) Regulations 1973 lay down strict security requirements for Controlled Drugs; but precautions against theft will also be required for other substances and money collected for prescription charges. The whole department should be planned as an integrally secure area with all entrances capable of being controlled. The project team should discuss hospital security with the officer in charge of the Police Crime Prevention Department and the Hospital or District Security Officer or advisers. Fire and Security Officers should be consulted concurrently at an early stage in the design of the building, for the demands of security and fire safety may sometimes conflict. (HBN, para. 3.3)

Earlier decision	Ref	4.3 SUPPLY AND STORAGE
2	A	The stores section of the pharmacy will require facilities for: (a) the reception and documentation of pharmaceutical supplies [ ] (b) bulk storage of drugs, fluids, etc. used in the pharmacy [ ] (c) issuing bulk supplies to wards, departments and the peripheral units [ ] (d) the storage of preparation containers, including those for return [ ] (e) the storage of other materials used in the pharmacy [ ] (f) Stock control [ ] (g) the receipt out of normal hours of drugs liable to misuse [ ] (h)
5A,B	B	Pharmaceutical supplies will be unloaded: (a) at the main hospital unloading bay [ ] (b) at the department's external goods entrance [ ] (c)
	C	Supplies will be checked and unpacked: (a) in the stores section of the pharmacy [ ] (b)
2D	D	Storage facilities will be required for: (a) wet bulk supplies [ ] (b) dry bulk supplies [ ] (c) drugs requiring cool conditions/refrigeration [ ] (d) drugs requiring special security [ ] (e) containers and materials [ ] (f) flammable materials [ ] (g) cleaning materials [ ] (h) medical gas cylinders [ ] (i) dressings - medicated [ ] (j) dressings - non-medicated (k)
2A, 5A,C	E	Security of drugs and stocks will be ensured by: (a) the fittings of locking systems on all entrances [ ] (b) limited and supervised access from outside [ ] (c) adequate checks on all stock holdings [ ] (d) distributing supplies in security containers [ ] (e)

4.3 SUPPLY AND STORAGE

REFRIGERATED STORAGE

Refrigerated cabinets should be served from remote plant rooms to avoid dissipation of heat in the cool store or sited in an area of the department where temperature is not critical.

FLAMMABLE STORAGE

Stocks of flammable materials should be kept away from user areas and the provision of an external isolated store for flammable materials is therefor essential. Local policy may require the pharmacy to be responsible for holding stocks of flammable materials for other departments as well. Advice on the storage of flammable materials is contained in Health Technical Memorandum 83 "Fire safety in health care premises - General Fire Precautions". (HBN, para.4.64)

Earlier decision | Ref

4.3 SUPPLY AND STORAGE (contd.)

A Refrigerated cabinets will be:
(a) sited in the cool store and served by a remote plant room [ ]
(b) sited in an area of the department where temperature is not critical [ ]
(c)

B Flammable materials will be stored:
(a) in a bulk store, isolated from the department/hospital, with small day-to-day supplies kept in the department [ ]
(b) in an area with direct external access [ ]
(c)

C Lockable containers for distribution services will be:
(a) held in the service area and removed for filling [ ]
(b)

D Trolleys will be packed:
(a) in the main storage area [ ]
(b) in the ward service area [ ]
(c) outside the department [ ]
(d)

HANDLING OF SUPPLIES

Subject to whole hospital policy, mechanical handling devices and trucks and trolleys may be used to move goods or transport them to and from the storage area. In view of the possibility of back injuries to staff involved in the handling of goods through stores, attention should be given to the provision of suitable trolleys and more specialist equipment such as drum handling apparatus. Reference should be made to relevent departmental and other guidance on the handling of loads made under the Health and Safety at Work Act legislation. To allow such equipment to be used safely and efficiently all floors should be level without steps, but circumstances may necessitate using a gentle slope. If goods are to be delivered to or received from storage units on a different floor from the stores, a goods hoist adjacent to the stores area will be required, capable of taking a fully laden trolley or pallet. (HBN, para. 4.49)

Earlier decision | Ref | 4.3 SUPPLY AND STORAGE (contd.)

A Drugs and pharmaceutical products will be supplied by:
(a) the area pharmaceutical headquarters [ ]
(b) manufacturers, direct to the department [ ]
(c) pharmaceutical wholesalers [ ]
(d)

B Bulk fluids will be supplied by:
(a) commercial manufacturers [ ]
(b) the area pharmaceutical headquarters [ ]
(c) the manufacturing unit [ ]
(d)

C Bulk fluid supplies will comprise:
(a) pallet loads [ ]
(b) wheeled pallet trucks [ ]
(c) individual boxes ("outers") [ ]
(d)

D Drugs, pharmaceutical products and bulk fluids will be:
(a) requisitioned as required [ ]
(b) subject to a stock control system [ ]
(c)

E Supply deliveries to be controlled by a topping-up system will be:
(a) cleaning materials [ ]
(b) linen [ ]
(c) stationery [ ]
(d) containers [ ]
(e) packaging materials [ ]
(f)

F Supplies to be controlled by a requisition system will be:
(a) cleaning materials [ ]
(b) linen [ ]
(c) stationery [ ]
(d) containers [ ]
(e) packaging materials [ ]
(f)

4.3 SUPPLY AND STORAGE (contd)

Earlier decision | Ref

4.3 SUPPLY AND STORAGE (contd.)

A The frequency at which supplies will be delivered will be:
(SPECIFY FREQUENCY)

(a) bulk infusion fluids _____
(b) wet bulk supplies _____
(c) dry bulk supplies _____
(d) drugs _____
(e) flammable materials _____
(f) medical gas cylinders _____
(g) cleaning materials _____
(h) linen _____
(i) stationery _____
(j) containers _____
(k) packaging materials _____
(l) dressings _____
(m)

B The number of days supply held in the department will be:
(SPECIFY NUMBER OF DAYS)

(a) bulk infusion fluids _____
(b) wet bulk supplies _____
(c) dry bulk supplies _____
(d) drugs _____
(e) flammable materials _____
(f) medical gas cylinders _____
(g) cleaning materials _____
(h) linen _____
(i) stationery _____
(j) containers _____
(k) packaging materials _____
(l) dressings _____
(m)

4.4 DISTRIBUTION

DISTRIBUTION SYSTEM

The distribution of medicines for wards and departments will be in accordance with the hospital policy and may be a stock checking system, a topping-up system, one-for-one exchange, or issue against stock requisitions. There may be a separate issue system for medicines dispensed against the patients' prescription cards. Bulk supplies of commonly used intravenous fluids, disinfectants, lotions, etc. may be distributed similarly.

WARD SERVICE AREA

Local policy may decide that in the interests of staff efficiency the routine of ward servicing should utilise a 'picking' system for items such as pre-packs. One arrangement would be to select these items directly from the main pharmacy store, but speedier 'picking' can be achieved by establishing a separate holding area for such items. Wards would then be supplied with stock either on the basis of requisitions or by a pharmacy operated 'topping up' service. With such a service the ward staffs' involvement in ordering medicines is reduced as the pharmacy staff check ward stocks against an agreed stock list and 'top up' the used items to the agreed levels. (see HBN, Figure 5) (HBN, para. 4.39)

Earlier decision	Ref	4.4 DISTRIBUTION
	A	The pharmacy distribution service will cover: (a) the out-patients department [ ] (b) the wards [ ] (c) the accident and emergency department [ ] (d) diagnostic departments [ ] (e) day hospitals on site [ ] (f) peripheral units: (SPECIFY) - -
4C		-
		(g) health centres (SPECIFY) - - -
		(h)
	B	Controlled drugs and drugs requiring security will be: (a) dispatched in locked containers from the returnable box holding store [ ] (b)
	C	This will be via: (a) the main hospital corridor to on-site wards and departments [ ] (b) the external goods entrance to peripheral units [ ] (c)
	D	Common stocks of pharmacy supplies (lotions, disinfectants, etc.) will be issued to wards and departments: (a) by a stock checking system [ ] (b) by a topping-up system [ ] (c) by a standing order [ ] (d) by one-for-one exchange (full for empty) [ ] (e) by ward requisition [ ] (f)
	E	Drugs will be supplied to wards and departments: (a) by a stock checking system [ ] (b) by a topping-up system [ ] (c) by requisition [ ]
7D		(d) against patients' prescription cards [ ] (e) in unit doses [ ] (f) picked from stocks reserved for ward service [ ] (g)

4.4 DISTRIBUTION (contd)

Earlier decision	Ref	4.4 DISTRIBUTION (contd.)
7D	A	Controlled drugs will be supplied to wards and departments: (a) by requisition [ ] (b) against patients' prescription cards [ ] (c) in unit doses [ ] (d)
7D	B	Drugs will be distributed to wards and departments from: (a) a ward service area [ ] (b) an anteroom (returnable box holding store) [ ] (c) via the main pharmacy entrance [ ] (d) via the stores entrance [ ] (e)
	C	Distribution will be by: (a) electric trolley within the hospital [ ] (b) special unit dose carts to wards [ ] (c) road transport to peripheral units and health centres [ ] (d)
5A	D	Supplies for external transport will be loaded: (a) at the department's external supplies bay [ ] (b) at the central hospital loading bay [ ] (c)
5A	E	Bulk sterile fluids for peripheral units will be supplied and delivered: (a) from the pharmacy stores [ ] (b) direct from the manufacturing unit [ ] (c)

4.5 EDUCATION

TECHNICAL INFORMATION ROOM

A technical information room, sited close to the dispensary section, will be required for the ward pharmacy service and also for medical and nursing staff who may wish to consult reference material maintained by the pharmaceutical staff. (HBN, para. 4.80)

Earlier decision | Ref | 4.5 EDUCATION

2A

A Instruction and teaching will be carried out in the department for:
(a) medical undergraduates [ ]
(b) medical postgraduates [ ]
(c) in-service pharmacists [ ]
(d) pre-registration pharmacy graduates [ ]
(e) technician trainees [ ]
(f) general medical practitioners [ ]
(g) pharmacy assistants in service [ ]
(h)

B And this will take place:
(a) in the working areas of the department [ ]
(b) in a technical information room in the department [ ]
(c) in a seminar room conjoint with the staff room [ ]
(d) in the office accommodation of the department [ ]
(e) in the hospital's education centre [ ]
(f)

C Facilities for study/research will be provided:
(a) in the department [ ]
(b) in the technical information room [ ]
(c) in the office accommodation of the department [ ]
(d)

D Information services for other hospital disciplines will be made available:
(a) in the technical information room [ ]
(b)

4.6 DRUG INFORMATION CENTRE

OBJECTIVE

The activities of drug information services are essentially linked to patient care and, as such, are viewed in close relationship to primary pharmaceutical services. (HBN para 4.79)

At district level (or other grouping of facilities akin to a Noel Hall pharmaceutical area), the activities undertaken by a specialised drug information centre would embrace those at individual hospital level. The centre would, in addition, undertake more detailed, literature based, research on queries referred to it, both from the hospital the centre is situated within, and from associated hospitals. Other services provided could include a wider dissemination of information to individuals and groups of health professionals and to drug and therapeutic committees. The normal location of such centres would therefore be in the largest acute or teaching hospital of the district/area. (HBN, para. 4.81)

SITING

Accessibility to the various interests served is a major factor in planning centres; location within an industrial zone for instance, would hardly be suitable. Siting adjacent to, or within, the pharmacy department of a large hospital would allow close liaison with the visiting ward pharmacists and other clinical staff. Alternatively there may be merit in choosing some busy part of the hospital like the main corridor. Where a centre is to fulfil a regional role other siting options may be considered. (HBN, para. 4.82)

Earlier decision | Ref

4.6 DRUG INFORMATION CENTRE

A The drug information unit will serve:
(a) single hospital in which located [ ]
(b) all hospitals in the district [ ]
(c) all hospitals in the pharmaceutical area [ ]
(d) all hospitals in the region [ ]
(e)

B The service will:
(a) provide facilities for pharmacy staff to seek answers to queries of a drug nature [ ]
(b) provide facilities for medical and nursing staff to seek answers to queries of a drug nature [ ]
(c) provide facilities for the unit's staff to follow up more complex queries [ ]
(d) provide facilities for seminars for pharmacy staff [ ]
(e) stock a range of periodicals and reference books [ ]
(f) edit and publish bulletins on specific topics [ ]
(g)

C Facilities for private study will include:
(a) quiet area with library carrells [ ]
(b) semi-easy chairs [ ]
(c)

17 D Seminar facilities will be provided for:
(a) up to 8 staff [ ]
(b) up to 12 staff [ ]
(c) up to 20 staff [ ]
(d)

17 E Seminar facilities will include provision for:
(a) blacking out [ ]
(b) showing slide presentations [ ]
(c) showing cine/video presentations [ ]
(d) lectures and note taking [ ]
(e)

F Specialist facilities required will include:
(a) microfiche reader [ ]
(b) photocopying facilities [ ]
(c) desktop printing facilities [ ]
(d) direct telephone line with outside exchange [ ]
(e) computer retrieval terminal [ ]
(f)

4.7 STERILE MANUFACTURING UNIT

MANUFACTURE AND ASSEMBLY

The Medicines Act 1968 made the commercial manufacture of medical products subject to strict licensing procedures and the health authorities were required to introduce corresponding arrangements by the terms of HSC(IS)128 (in Scotland, NHS Circular 1975 (GEN) 40 and in Wales, HSC(IS)136). It is implicit in these arrangements that the premises and facilities of a hospital's manufacturing unit - new or upgraded - should meet the required standards, as indicated in the "Guide to Good Pharmaceutial Manufacturing Practice 1977" (HMSO). Medicines Inspectors may have to visit the premises and report on their suitability; authorities are therefore urged to invite their comments at the planning stage on whether or not the proposal for a certain manufacturing unit is likely to be acceptable if carried out.

Manufacture or assembly can be defined in this context to include:

(a) the preparation of any radiopharmaceutical product;
(b) the preparation of any biological product or products containing a steroid or antibiotic;
(c) the preparation of medicinal products other than (a) or (b);
(d) the assembly (i.e. placing in immediate containers) of medicinal products by automatic machinery.

The manufacture of medicinal products can be broadly divided into sterile and non-sterile production. The former involves procedures designed to eliminate contamination by viable micro-organisms, while contamination control for the latter is not quite so rigorous. Many items for topical use need to be prepared under clean environmental conditions. There is merit in grouping the manufacturing etc., services together in one location, because of similar requirements for engineering services and construction finishes. The necessity of staff rotation as well as mixed duties in smaller units should not be overlooked.

Earlier decision | Ref

4.7 STERILE MANUFACTURING UNIT

A Facilities will be required in this unit for:
(a) producing special sterile formulations [ ]
(b) producing specialist infusion fluids [ ]
(c) producing special ophthalmic preparations [ ]
(d) producing sterile products (antibiotics, cytotoxics) which may be hazardous to the operators [ ]
(e) producing sterile distilled water [ ]
(f) producing sterile antiseptic preparations [ ]
(g) producing products aseptically [ ]
(h)

B The manufacture of sterile products will be for:
(a) local use [ ]
(b) use of peripheral units [ ]
(c) area use [ ]
(d) regional use [ ]
(e)

C The number of batches per year will be: (SPECIFY)
(a) special infusion fluids _____
(b) other special formulations _____
(c) long-run lines _____
(d)

D Products will be produced:
(a) in DIN standard glass bottles [ ]
(b) in plastic preformed bottles [ ]
(c) in plastic bags [ ]
(d) in plastic bottles formed in situ [ ]
(e)

4.7 STERILE MANUFACTURING UNIT (contd.)

OBJECTIVE

This facility is primarily for the batch production of sterile medicinal products not generally available from commercial sources such as special formulations of transfusion or topical fluids, small volume eye drops, or injections (see Appendix II of the Building Note for Departmental guidance). The majority of the products so manufactured are terminally sterilized, i.e. after sealing into final containers, although some products are damaged by heat and need to be filled asceptically into sterilized containers. (HBN, para.5.16)

SUITE CONSTRUCTION AND FINISHING

See HBN, para 5.31 for specific requirements

MECHANICAL VENTILATION

See HBN, para 5.32 - 5.34 for specific requirements

Earlier decision | Ref

4.7 STERILE MANUFACTURING UNIT (contd.)

2B

A A sterile suite will be required with facilities for:
(a) the manual preparation of sterile products [ ]
(b) the preparation of products requiring aseptic techniques [ ]
(c) filtering and filling liquid products into containers [ ]
(d) capping containers [ ]
(e) cleaning of movable tanks, etc. [ ]
(f) storage of cleaning materials reserved for the suite [ ]
(g) cleaning clean room clothing [ ]
(h)

B Access/egress will be required from the controlled suite for:
(a) materials and products [ ]
(b) equipment and consumables [ ]
(c) staff [ ]
(d) clean containers [ ]
(e)

C Access to the suite will be:
(a) through an airlocked entrance-way for staff [ ]
(b) via an airlocked hatchway opening into the preparation room [ ]
(c) via a bottle hatch from container cleansing to filling point [ ]
(d) via a bottle conveyor from container cleansing to filling point [
(e)

D Staff entering the suite will be required to:
(a) scrub up and change on entering the suite
(b) scrub up and change to sterile clothing before entering aseptic room [ ]
(c)

E Exit from the suite for products will be:
(a) through an airlocked hatch out to the autoclave loading area [ ]
(b) through an airlock containing a trolley transfer station to the autoclave loading area [ ]
(c)

F Preparation equipment required in the suite will include:
(a) movable tanks [ ]
(b) mixing apparatus [ ]
(c) filtering apparatus [ ]
(d) steriliser transfer trolley [ ]
(e) ampoule washer [ ]
(f) ampoule sealer [ ]
(g)

4.7 STERILE MANUFACTURING UNIT (contd)

Earlier decision | Ref

4.7 STERILE MANUFACTURING UNIT (contd.)

A Ancillary accommodation will be required for:
(a) holding raw materials [ ]
(b) holding clean equipment [ ]
(c) holding empty containers [ ]
(d) holding bulk supplies of special clothing, gloves, overshoes, etc. [ ]
(e) weighing materials [ ]
(f) container cleansing [ ]
(g) in-process testing [ ]
(h) steriliser loading [ ]
(i) steriliser maintenance [ ]
(j) cooling after sterilisation [ ]
(k) inspection and labelling [ ]
(l) label storage [ ]
(m) quarantine storage whilst awaiting quality control clearance [ ]
(n) finished product storage [ ]
(o) office accommodation/record storage [ ]
(p) staff entrance lobby with hand-wash facilities [ ]
(q)
(r)

B Equipment required in the ancillary accommodation will include:
(a) weighing balances [ ]
(b) rotary bottle wash equipment [ ]
(c) conveyor bottle rinse equipment [ ]
(d) closure preparation equipment [ ]
(e) in-process testing equipment - pH meter, refractometer, etc. [ ]
(f) steam sterilisers [ ]
(g) hot air sterilisers [ ]
(h) visual inspection apparatus [ ]
(i) label printer [ ]
(j) labelling machine [ ]
(k)

5A C Access to/from the unit will be required for:
(a) porters' room/base [ ]
(b) cleaners' base (general) [ ]
(c) goods reception/dispatch [ ]
(d)

4.7 STERILE MANUFACTURING UNIT (contd)

DISTILLED WATER

See HBN, para. 5.35 for options regarding distilled water supply.

STERILISERS

Steam and hot air sterilizers should comply with Health Technical Memorandum (HTM) 10 standards, and be sealed into the wall to present a flat, easy-to-clean surface incorporating gauges, controls and thermocouple ports. Single-ended sterilizers are recommended and a local policy decision is required about the best mix of sterilizer sizes and types to match the product range and batch quantities. (HBN, para. 5.37)

Earlier decision | Ref

4.7 STERILE MANUFACTURING UNIT (contd.)

A Distilled water will be required:
(a) for cleaning containers [ ]
(b) for preparing solutions in the suite [ ]
(c) for cleansing equipment in the suite [ ]
(d)

B Distilled water will be:
(a) provided directly from stills to point of use [ ]
(b) produced and stored (for up to four hours) in one or more tanks near to point of use [ ]
(c) produced and stored on a ring main circuit which recycles water at a temperature (measured on return) of 65°C [ ]
(d)

C The unit will have the following sterilisers:
(a) 14 cu.ft capacity, steam [ ]
(b) 21 cu.ft capacity, steam [ ]
(c) 28 cu.ft capacity, steam [ ]
(d)
(e)

(f) hot air steriliser, less than 100 l. capacity [ ]
(g) hot air steriliser, greater than 200 l. capacity [ ]

4.7 STERILE MANUFACTURING UNIT (contd)

LABELLING

Secure label storage, such as lockable cupboards will be required, with restricted access. The number of labels issued for each batch of a product is strictly controlled, with counting before and after use; only after this kind of audit can any unused labels be destroyed. Storage arrangements, should ensure that the risk of label mix-up is minimised. If a label printing facility is being provided it should be associated with this storage. (HBN, para. 5.10)

Earlier decision | Ref

4.7 STERILE MANUFACTURING UNIT (contd.)

A Labelling will be performed by:
(a) printing label in situ for that batch [ ]
(b) adding manually batch number and expiry date to pre-printed label [ ]
(c)
(d) labels affixed by hand [ ]
(e) labels affixed by manually controlled machine [ ]
(f) labels printed and affixed by automatic conveyor labeller [ ]
(g)

B Large volume products (e.g. influsion solutions) will be batched:
(a) on standard pallets [ ]
(b) in wheeled pallet trucks [ ]
(c)

C Quarantine storage will be required for:
(a) two weeks' production [ ]
(b) one month's production [ ]
(c) six weeks' production [ ]
(d)

D Finished product storage will be required for:
(a) one month's production [ ]
(b) six weeks' production [ ]
(c) two months' production [ ]
(d)

4.8 NON-STERILE MANUFACTURING UNIT

MANUFACTURING AND ASSEMBLY

See Guidance, p. 19

This unit is concerned with the preparation of solid and liquid medicinal products, for oral or external use within are not required to be sterile, such as medicinal mixtures, powders, suppositories, ointments and creams. This section does not cover the manufacture of tablets, but capsule filling may come within the ambit of a non-sterile manufacturing unit. Again the provisions of the Department's circular on manufacturing must be considered first before building such a unit. The bulk of the unit's work takes place in a general purpose preparations area, supported by weighing and container preparation rooms, inspection and labelling area, and quarantine stores. (HBN, Figure 21) (HBN, para. 5.41)

On the whole, the standards of premises and finishes required for such a unit are comparable with those for sterile manufacture with less stringent air supply, i.e. Class 4 of BS 5295 (but except ointments and creams, Class 3). Cold water should be available for certain purposes drawn straight from mains, as tank water is unsuitable. Purified water is also needed. (HBN, para. 5.42)

Earlier decision | Ref | 4.8 NON-STERILE MANUFACTURING UNIT

2B

A Non-sterile products manufactured in this unit will include:
(a) liquid medicines for internal use [ ]
(b) liquid medicines for external use [ ]
(c) extemporaneously prepared powders [ ]
(d) extemporaneously prepared capsules [ ]
(e) extemporaneously prepared suppositories [ ]
(f) ointments and creams (special formulations) [ ]
(g) alcoholic antiseptics [ ]
(h) disinfectants [ ]
(i)

B The manufacture of non-sterile products will be for:
(a) local use [ ]
(b) use of peripheral units [ ]
(c) area use [ ]
(d) regional use [ ]
(e)

C Facilities required include accommodation for preparing:
(a) liquid products [ ]
(b) solid products [ ]
(c) ointments and creams [ ]
(d) products hazardous to the operator [ ]
(e)

D The number of batches per year will be: (SPECIFY)
(a) liquid products _____
(b) solid products _____
(c) ointments and creams _____
(d) products hazardous to the operator _____
(e)

E Containers used will include:
(a) glass medicine bottles [ ]
(b) ointment and cream tubes [ ]
(c) screw-top glass jars [ ]
(d) card boxes [ ]
(e) ribbed glass bottles [ ]
(f) plastic dispensing pots [ ]
(g)

4.8. NON-STERILE MANUFACTURING UNIT (contd.)

Earlier decision | Ref

4.8 NON-STERILE MANUFACTURING UNIT (contd.)

A Ancillary accommodation will be required for:
(a) holding raw materials [ ]
(b) holding empty containers [ ]
(c) producing distilled water [ ]
(d) weighing materials [ ]
(e) container cleansing [ ]
(f) in-process testing [ ]
(g) inspection and labelling [ ]
(h) label storage [ ]
(i) equipment cleansing and holding clean equipment [ ]
(j) quarantine storage whilst awaiting quality control clearance [ ]
(k) finished product storage [ ]
(l) office accommodation/record storage [ ]
(m) staff entrance lobby with handwash facilities [ ]
(n) access to delivery/dispatch area [ ]
(o)

B Equipment required for liquid preparations will include:
(a) mixing vessels and mixers [ ]
(b) filling apparatus [ ]
(c) paste mill [ ]
(d)

C Equipment required for solids preparation will include:
(a) water batch and moulds for suppositories [ ]
(b) capsule filling machine [ ]
(c) safety cabinet for powders [ ]
(d)

D Equipment required for ointments and creams will include:
(a) steam or electrically heated pans [ ]
(b) planetary mixers [ ]
(c) tube/jar filling equipment [ ]
(d) tube sealing and crimping equipment [ ]
(e)

E Equipment required for hazardous products will include:
(a) "fume" cupboard at bench height [ ]
(b) walk-in "fume" cupboard [ ]
(c) Class II microbiological safety cabinet [ ]
(d)

4.8 NON-STERILE MANUFACTURING UNIT (cond.)

LABELLING

See Guidance, p.23.

Earlier decision | Ref

4.8 NON-STERILE MANUFACTURING UNIT (contd.)

A Labelling will take place:
(a) on bench, where product manufactured [ ]
(b) in a separate labelling area by hand [ ]
(c) by use of a conveyor labelling machine [ ]
(d)

B Labels will be produced by:
(a) printing whole label in situ for that batch [ ]
(b) adding batch number and expiry date by manually-operated machine to pre-printed label [ ]
(c)

C Products will be batched by:
(a) use of standard pallets [ ]
(b) packing into boxes [ ]
(c) shrink wrapping [ ]
(d)

D Quarantine storage will be required for:
(a) two weeks' production [ ]
(b) one month's production [ ]
(c) six weeks' production [ ]
(d)

E Finished product storage will be required for:
(a) one month's production [ ]
(b) six weeks' production [ ]
(c) two months' production [ ]
(d)

4.9 ASSEMBLY UNIT

MANUFACTURE AND ASSEMBLY

See Guidance, p. 19

ASSEMBLY

The function of this support unit is to repackage items into different containers, i.e. in a form suitable for patient use. For the purpose of the following description of facilities it is assumed that only bought-in products are repacked. A multi-purpose work area is needed and a range of equipment, for example, counting aids for tablets and capsules or strip packing machinery. The exposed product will need protecting from debris derived from the outer packaging of empty containers, which should therefore be unpacked in a separate area. Potent or sensitizing products such as uncoated penicillin tablets or steriod products will require special safeguards, such as local dust extraction. Where the throughput of such products is large, some equipment may need to be reserved solely for them to avoid contamination of other products. (HBN, Figure 22)
(HBN, para.5.51)

Earlier decision	Ref	4.9 ASSEMBLY UNIT
	A	The assembly unit will pack the following: (a) tablets [ ] (b) capsules [ ] (c) uncoated antibiotic tablets [ ] (d) antibiotic capsules [ ] (e) liquids for external use [ ] (f) liquids for internal use [ ] (g) flammable liquids [ ] (h) items produced by an adjacent non-sterile manufacturing unit [ ] (i) certain tablets and capsules into strip and blister packs [ ] (j)
2B,12B 24A		
2A,3A	B	The unit will supply for: (a) local use [ ] (b) use of peripheral units [ ] (c) area use [ ] (d) regional use [ ] (e)
	C	The number of batches per year will be: (SPECIFY) (a) tablets and capsules _____ (b) uncoated antibiotic tablets and antibiotic capsules _____ (c) liquid preparations _____ (d) flammable preparations _____ (e)
	D	Packing tablets and capsules will include: (a) short runs using electronic counters [ ] (b) short runs using specially reserved counters in operator protection cabinets for uncoated antibiotic tablets/capsules [ ] (c) long runs using automatic equipment and conveyors [ ] (d)
	E	Containers used will include: (a) glass tablet bottles [ ] (b) plastic tablet vials [ ] (c) glass medicine bottles [ ] (d) ribbed glass bottles [ ] (e) card boxes for strip and blister packs [ ] (f) child-resistant bottle and vial tops [ ] (g)

4.9 ASSEMBLY UNIT (contd)

LABELLING

See Guidance, p. 23

Earlier decision | Ref

4.9 ASSEMBLY UNIT (contd)

A Equipment required will include:
(a) electronic counters in operator protection cabinets [ ]
(b) conveyor tablet/capsule packing line [ ]
(c) strip packing equipment [ ]
(d) liquid filling equipment [ ]
(e) sparkproof filling equipment for flammable materials [ ]
(f) walk-in fume cupboard for flammable materials [ ]
(g)

B Stores need to be adjacent for:
(a) bulk stocks of materials to repack [ ]
(b) containers [ ]
(c) flammable materials [ ]
(d) storage of finished materials [ ]
(e)

C The unit should have additional facilities for:
(a) container cleansing [ ]
(b) holding batches for visual inspection [ ]
(c) office accommodation/record storage [ ]
(d) staff entrance lobby with hand wash facilities [ ]
(e) equipment cleaning and storage [ ]
(f) access to delivery/dispatch area [ ]
(g)

D Labelling will take place:
(a) on bench where repacked [ ]
(b) by hand in a separate labelling area [ ]
(c) by use of a labelling machine/conveyor labeller [ ]
(d)

E Labels will be produced by:
(a) printing whole label in situ for that batch [ ]
(b) adding batch number and expiry date by manually-operated machine to pre-printed label [ ]
(c)

F Products will be batched by:
(a) packing into boxes [ ]
(b) shrink wrapping [ ]
(c)

G Finished product storage will be required for:
(a) two weeks' production [ ]
(b) one months' production [ ]
(c) two months' production [ ]
(d)

4.10 QUALITY CONTROL UNIT

QUALITY CONTROL

Quality control forms an integral part of good manufacturing practice and this is reflected in the "Guide to Good Pharmaceutical Manufacturing Practice". For this reason a quality control service is likely to be provided alongside manufacturing elements and should be included in the costing of the manufacturing process. (2.17)
Where this is not possible rudimentary on-site quality control facilities will still be required. The philosophy underlying quality control has an important part to play in drug contractual procedures and monitoring environmental standards, so the service is also supportive of primary services. Because of the high cost of certain specialised equipment, individual quality control laboratories within a region may perform particular tests for the whole region. (HBN, para. 2.12)

Earlier decision | Ref

4.10 QUALITY CONTROL UNIT

A The unit will:
(a) provide in-process control on sterile manufactured items [ ]
(b) provide in-process control on non-sterile manufactured items [ ]
(c) provide final quality control testing on sterile manufactured items [ ]
(d) provide final quality control testing on non-sterile manufactured items [ ]
(e) perform tests on bought-in products [ ]
(f) perform tests on containers and packaging materials [ ]
(g) perform tests on medical gas pipeliners prior to commissioning [ ]
(h) monitor air environment in manufacturing suite [ ]
(i) hold reference samples of hospital-manufactured products [ ]
(j)

B The unit will provide a service for:
(a) adjacent manufacturing units [ ]
(b) manufacturing units in the district [ ]
(c) more than one district [ ]
(d) specialist service using specialist equipment for the whole region [ ]
(e) full quality control service for the whole region [ ]
(f)

C The unit will perform the following types of test:
(a) visual examination [ ]
(b) pH determination [ ]
(c) identity test by chemical means [ ]
(d) chemical assays [ ]
(e) identity tests by non-chemical characteristics (e.g. infra-red spectrum [ ]
(f) assays by non-chemical methods [ ]
(g) tests of physical characteristics (e.g. viscosity) [ ]
(h) limit tests for heavy metals [ ]
(i) sterility testing of sterile materials [ ]
(j) microbiological limit tests [ ]
(k) pyrogen testing by the LAL method [ ]
(l)

D Specialist equipment provided for this unit includes:
(a) ultra-violet/visual spectrum spectrophotometer [ ]
(b) infra-red spectrophotometer [ ]
(c) flame photometer [ ]
(d) particle counter [ ]
(e)

4.11 PURCHASE AND DISTRIBUTION UNIT

OBJECTIVE

Economies can often be made by centralising in one unit the purchasing and distribution arrangements for a number of hospitals. This support unit would also purchase for the manufacturing and assembly units, and could provide the storage requirements for them, thus an adjacent location would be advantageous. If the unit is to handle materials which are subject to quality control measures it will need facilities for quarantine as well. (HBN para 5.77)

SUPPLIES RECEPTION AND HANDLING

The reception and unpacking of supplies and the assembly of deliveries will play a more important part in the unit's workflow than in pharmacy department providing solely for patient services. (Figure 24). Stock turnover will be faster, thus making more economic use of storage space, and this would be reflected in the balance between stores and working areas. The disposal of considerable quantities of waste packaging materials needs to be considered at an early stage and an external collection point is recommended. Advice contained in the "Guide to Good Pharmaceutical Manufacturing Practice" (Chapter 18, Good Pharmaceutical Wholesaling Practice) could be applied to this unit. (HBN, para. 5.78)

Earlier decision	Ref	4.11 PURCHASE AND DISTRIBUTION UNIT
2A,B	A	This unit will order, stock and receive pharmaceutical items for: (a) the district [ ] (b) the pharmaceutical area [ ] (c)
2A	B	It will supply items to: (a) each pharmacy department in the locality served [ ] (b) health clinics in the locality [ ] (c) pharmaceutical support services in the locality [ ] (e)
2A,B	C	Facilities will be required for: (a) the reception and documentation of supplies [ ] (b) bulk storage of finished pharmaceutical products [ ] (c) storage of raw materials and ingredients [ ] (d) the storage of empty containers including those for return [ ] (e) the storage of other materials used in pharmacy [ ] (f) stock control and ordering [ ] (g) issuing of supplies [ ] (h) storage under security conditions of controlled drugs [ ] (i) storekeepers and porters [ ] (j) office accommodation for pharmacist and clerks [ ] (k)
5A,C 11B	D	Pharmaceutical supplies will be unloaded: (a) at an unloading bay conjoint with other hospital departments [ ] (b) at a separate pharmacy unloading bay [ ] (c)
11D	E	Storage facilities will be required for: (a) wet bulk supplies [ ] (b) dry bulk supplies [ ] (c) drugs requiring cool conditions/refrigeration [ ] (d) drugs requiring special security [ ] (e) containers and materials [ ] (f) flammable materials [ ] (g) dressings - medicated [ ] (h) dressings - non-medicated [ ] (i)
11E 5A,C	F	Security of drugs and stocks will be aided by: (a) the fitting of locking systems on all entrances [ ] (b) limited and supervised access from outside [ ] (c) adequate check on all stock holding [ ] (d)

4.11 PURCHASE AND DISTRIBUTION UNIT (contd)

Earlier decision | Ref | 4.11 PURCHASE AND DISTRIBUTION UNIT (contd.)

A

13A

Drugs, pharmaceutical products and bulk fluids will be supplied by_
(a) commercial manufacturers [ ]
(b) pharmaceutical wholesalers [ ]
(c) pharmaceutical manufacturing support services [ ]
(d)

13C

B

Bulk fluids supplies will comprise:
(a) pallet loads [ ]
(b) wheeled pallet trucks [ ]
(c) individual boxes ("outers") [ ]
(d)

13D

C

The frequency at which supplies will be delivered will be:
(SPECIFY FREQUENCY)

(a) bulk infusion and topical fluids _____

(b) wet bulk supplies _____

(c) dry bulk supplies _____

(d) drugs and medicated dressing _____

(e) flammable materials _____

(f) containers _____

(g) packaging materials _____

(h) stationery _____

(i) dressings _____

(j)

D

The number of weeks supply held in the unit will be:
(SPECIFY NUMBER OF WEEKS)

(a) bulk infusion and topical fluids _____

(b) wet bulk supplies _____

(c) dry bulk supplies _____

(d) drugs and medicated dressings _____

(e) flammable materials _____

(f) containers _____

(g) packaging materials _____

(h) stationery _____

(i) dressings _____

(j)

4.11 PURCHASE AND DISTRIBUTION UNIT (contd)

REFRIGERATED STORAGE

Refrigerated cabinets should be served from remote plant rooms to avoid dissipation of heat in the cool store or sited in an area of the department where temperature is not critical.

Earlier decision	Ref	4.11 PURCHASE AND DISTRIBUTION UNIT (contd.)
31B	A	Bulk fluids will be stored: (a) in an open area of the store [ ] (b) on pallet racking at two levels [ ] (c) on conventional racking [ ] (d)
	B	Refrigerated cabinets will be: (a) sited in the cool store, and served by a remote plant room [ ] (b) sited in an area of the department where temperature is not critical [ ] (c)

4.12 RADIOPHARMACEUTICAL PREPARATION

OBJECTIVE

Radiopharmaceuticals, as the name implies, are medicinal products which achieve their diagnostic or therapeutic purpose by virtue of the radioactivity they contain; examples of their use include producing scans of diseased tissues on imaging equipment; and by positioning them within the body, effecting treatment by irradiating certain organs. Since radiopharmaceuticals are both medicinal products and radioactive substances, Medicines Act controls and radiation safety controls apply. (HBN, para. 6.2)

GUIDANCE

The preparation of any radiopharmaceutical product is considered to be a form of manufacturing or assembly under the terms of the Medicines Act, and therefore, the recommendations given in the "Guide to Good Pharmaceutical Manufacturing Practice", Chapter 13, apply. The local Medicine Inspector should be consulted, particularly when designing facilities concerned with the use of 'open' manipulations. (HBN para 6.3)

The design and operation of any radiopharmaceutical preparation facilities within a hospital requires the close co-operation of the hospital's radiation protection advisor. (HBN, para. 6.4)

Specific guidance is given in Guidance Notes for hospitals on the premises and environment for the preparation of Radiopharmaceuticals (DHSS, 1982) and Nuclear Medicines Communication Volume 1.

LOCATION

The siting of facilities for the preparation of radiopharmaceuticals requires the same careful consideration as for other pharmaceutical services. Typically radiopharmaceuticals have short half lives so the preparation, delivery to the clinic and administering to the patient should take place within the working day. This may limit the cost effectiveness of any centralisation within such a service, particularly in rural areas; although a pattern of simple facilities using the 'closed' technique backed up by one or two larger units per region, may prove to be more flexible and productive than a handful of large units in an urbanised region. (HBN, para. 6.6)

Earlier decision	Ref	4.12 RADIOPHARMACEUTICAL PREPARATION
2B	A	Facilities will be required in this unit for: (a) dispensing injectable radiopharmaceuticals [ ] (b) dispensing liquid oral dose radiopharmaceuticals [ ] (c) dispensing solid oral dose radiopharmaceuticals [ ] (d) labelling samples of patients' blood with radioisotope markers [ ] (e)
	B	The products from this unit will be for administration: (a) in the radioisotope department [ ] (b) in the radiodiagnostic department [ ] (c) in a special ward [ ] (d) in another hospital within a convenient travelling distance [ ] (e)
	C	The unit will be located: (a) adjacent to the pharmacy department [ ] (b) adjacent to the sterile manufacturing unit [ ] (c) in the radioisotope department [ ] (d) as a separate building [ ] (e)
	D	The unit will have close links with: (a) the pharmacy department [ ] (b) the radioisotope department [ ] (c) the radiodiagnostic department [ ] (d) a special ward (specify) _____ (e) transport and delivery services [ ] (f)
	E	Radioisotopes handled will include: (a) 99m TC [ ] (b) 131 I [ ] (c) 32 P [ ] (d) 51 Cr [ ] (e)
	F	Radiation protection will be required for: (a) ___ radiation [ ] (b) ___ radiation [ ] (c) ___ radiation [ ] (d)

4.12 RADIOPHARMACEUTICAL PREPARATION (contd)

CLOSED AND OPEN PROCEDURES

Procedures used in the preparation of radiopharmaceuticals are similar to those used in sterile manufacturing, notably, aseptic dispensing. The extra factor with radiopharmaceuticals however is that there are a range of 'kits' available commercially for commonly used preparations, which simplify the procedures by making available the required set of sterile reagents or ingredients. A kit may include a radionuclide generator which provides a radioactive solution called the eluate. When a generator is operated in accordance with the manufacturers' instructions, it can be considered as a closed system and provide a sterile eluate. The simple operation of passing the eluate from the generator to a rubber-capped vial can be regarded as a 'closed' procedure. Some kits contain ingredients in ampoules rather than rubber-capped vials or generators; the Departmental guidance notes consider the use of such material also to be part of a 'closed' system, provided the ampoule is opened only within a contained workstation, only one withdrawal is made, and the contents are added immediately to the closed container (by a hypodermic syringe with the needle inserted through the rubber closure). Any other procedure, whereby an ingredient or partly finished product after sterilization is open to the atmosphere by not being enclosed in a vial, syringe, generator or other sealed container, is considered an 'open' procedure. Open procedures are now rare even in blood labelling and research programmes. (HBN, para. 6 .8)

Earlier decision | Ref

4.12 RADIOPHARMACEUTICAL PREPARATION (contd.)

A The procedures adopted will be:
(a) closed procedures only [ ]
(b) closed procedures and blood labelling only [ ]
(c) open and closed procedures [ ]
(d) open and closed procedures and blood labelling [ ]
(e)

B Facilities required will be:
(a) a controlled environment suite of rooms [ ]
(b) storage of materials [ ]
(c) office accommodation [ ]
(d) sterilising facilities [ ]
(e) checking and labelling facilities [ ]
(f) simple quality control facilities [ ]
(g) radioisotope counting facilities [ ]
(h)

C The suite will comprise:
(a) an aseptic room for open procedures [ ]
(b) separate changing accommodation on staff entry/exit to/from the aseptic room [ ]
(c) a preparation/support room for initial manipulation of materials and closed procedures [ ]
(d) changing facilities for the preparation/support room [ ]
(e) a closed procedures room [ ]
(f) a blood labelling room [ ]
(g) changing facilities associated with (e) and/or (f) above [ ]
(h)

D Items stored will include:
(a) generators [ ]
(b) radiopharmaceutical kits [ ]
(c) sterile IV fluids for dispensing injections [ ]
(d) lead shielding [ ]
(e) lead pots [ ]
(f) syringes and syringe shields; sterile vials and ampoules [ ]
(g) work trays [ ]
(h) written worksheets and records [ ]
(i) label blanks [ ]
(j) clean room clothing [ ]
(k) chemicals [ ]
(l)

E Storage of materials will take place:
(a) within the preparation/support room of the suite [ ]
(b) in a separate storage area [ ]
(c) for generators - within contained work stations [ ]
(d)

4.12 RADIOPHARMACEUTICAL PREPARATION (contd.)

Earlier decision | Ref

4.12 RADIOPHARMACEUTICAL PREPARATION (contd.)

A Equipment used will be:
(a) contained work station(s) to radiopharmaceutical standards (Number required _____)
(b) High Integrity Enclosure System with air flow (Number required _____)
(c) fume cupboard [ ]
(d) radioisotope calibration monitors [ ]
(e) chromatography equipment [ ]
(f) pH meter [ ]
(g) general purpose radioisotope monitor [ ]
(h) small fluids sterilizer [ ]
(i) polarized light [ ]
(j)

B The contained work stations will be located in:
(a) the aseptic room [ ]
(b) the preparation/support room [ ]
(c) the closed procedure room [ ]
(d) the blood labelling room [ ]
(e)

C Disposal of used material will be by:
(a) generators - return to supplier [ ]
(b) solid waste - collection in special bins marked as radioactive waste [ ]
(c) liquids - (low dose radiation) - pouring direct to main sewer via sink. [ ]
(d)

4.13 MANAGEMENT AND STAFFING

PORTERS

It is advised that the distribution of supplies should be undertaken by porters permanently attached to the department.

CLEANING

The need for the department's daily cleaning to be undertaken before it is vacated and made secure is a factor not to be overlooked in the siting of the cleaners' room.

Earlier decision	Ref	4.13 MANAGEMENT AND STAFFING
2C	A	The day-to-day general management of the department will be the responsibility of the: (a) area pharmacist [ ] (b) prinicipal pharmacist [ ] (c) staff pharmacist [ ] (d) pharmacist [ ] (e)
	B	These staff will be supported by the following administrative staff: (a) secretary [ ] (b) clerical officers [ ] (c)
4C	C	The above pharmacists and clerical staff will require offices: (a) within the department [ ] (b) centrally (i.e. administrative) [ ] (c) with the exception of: (SPECIFY EXCLUSIONS) [ ] - - - (d)
	D	Porters will be: (a) provided exclusively for the department on a permanent basis [ ] (b) seconded to the department [ ] (c) provided from central portering services [ ] (d)
	E	The person responsible for organising domestic services will be: (a) a domestic supervisor [ ] (b)

4.13 MANAGEMENT AND STAFFING (contd)

STAFFING

The workload on the Pharmacy Department may vary significantly according to the type of sessions. Experience will indicate which clinics may create the largest workloads and staff should be deployed to enable this demand to be met with the minimum of delay for out-patients. Special care will be needed in allocating staff hours to ensure that the end of each clinic is adequately covered.

Earlier decision | Ref

4.13 MANAGEMENT AND STAFFING (contd.)

17A,B — A

The estimated number, for planning purposes, of pharmacists working in the department at any one time may include:

	Full-time	Part-time	WTE
(a) principal pharmacist			
(b) staff pharmacists			
(c) basic grade pharmacist			
(d)			

17A,B — B

The estimated number, for planning purposes, of paramedical/professional/technical staff working in the department at any one time may include:

	Full-time	Part-time	WTE
(a) pre-registration graduate			
(b) senior technician			
(c) technician			
(d) student technician			
(e) scientist - non-medical			
(f)			

C

The estimated number, for planning purposes, of auxiliary/administrative/ancillary staff working in the department at any one time may include:

	Full-time	Part-time	WTE
(a) pharmacy assistants			
(b) laboratory assistants			
(c) clerical/secretarial staff			
(d) domestic assistants			
(e) mechanical scrub operator			
(f) porters			
(g) cleaners			
(h) storekeepers			
(i)			

36D

4.14 STAFF FACILITIES

LATE MEALS

The extension of coverage by staff in the department may make a demand for late meals.

Earlier decision	Ref	4.14 STAFF FACILITIES
	A	The estimated number of staff, for planning purposes, working in this department will be: (a) male _____ (b) female _____
	B	Staff will use: (a) the central changing accommodation of the hospital with small lockers for personal possessions provided in the department [ ] (b) department changing accommodation [ ] (c) the central changing accommodation with the exception of the following: (SPECIFY EXCEPTIONS) - staff working in the sterile dispensary [ ] - - (d)
	C	Sanitary facilities for staff will be sited: (a) near to staff offices and rest room [ ] (b)
4A	D	Overnight staff accommodation will be provided: (a) in the department [ ] (b) in the seminar room [ ] (c) outside the department [ ] (d)
	E	Rest room facilities for department staff will be provided: (a) in the staff rest room [ ] (b) in the seminar room [ ] (c) outside the department [ ] (d)
	F	Staff will take their: (a) main meals, beverages and light snacks in the central restaurant or snack bar [ ] (b) main meals in the central restaurant or snack bar [ ] (c) beverages in the department [ ] (d)
4A	G	Staff will obtain meals out of normal working hours: (a) from the snack bar [ ] (b) from the central restaurant [ ] (c)

4.14 STAFF FACILITIES (contd)

Earlier decision	Ref	4.14 STAFF FACILITIES (contd)
21,36D 37C	A	A porters' base will be required: (a) near to the dispensary area and stores [ ] (b)
5A,11B	B	A storekeepers' office will be required: (a) near to the goods reception and main store areas [ ] (b)

4.15 DISPOSAL AND CLEANING

WASTE DISPOSAL

Used packaging materials from pharmaceutical supplies tend to accumulate and hazardous waste material may be produced by certain pharmacy operations as well as chemical wastes from analytical procedures. The collection and disposal of such materials needs careful consideration and planning.

Earlier decision | Ref

4.15 DISPOSAL AND CLEANING

A The system of disposal will be:
(a) waste for disposal in bags, colour coded [ ]
(b) returnable empties in labelled containers [ ]
(c)

B Waste for destruction will be collected
(a) daily [ ]
(b) twice daily [ ]
(c)

C Returnable empties (e.g. cylinders, bottles) will be collected:
(a) daily [ ]
(b) twice daily [ ]
(c)

D The disposal of outdated and returned stocks will be the responsibility of the pharmacist and these will be:
(a) disposed of within the department [ ]
(b) disposed of outside the department [ ]
(c)

E Plastic bottles and other containers will be disposed of by:
(a) on-site incineration [ ]
(b) the local authority [ ]
(c)

4.15 DISPOSAL AND CLEANING (contd)

Earlier decision | Ref

4.15 DISPOSAL AND CLEANING (contd)

A Hand-drying in WC facilities will be by:
(a) disposable towels [ ]
(b) non-disposable towels (supplied by hospital) [ ]
(c) non-disposable towels (supplied by outside contract) [ ]
(d) a hot air hand-drying system [ ]
(e)

B Hand-drying in working areas will be by:
(a) disposable towels [ ]
37C (b) non-disposable towels (supplied by hospital) [ ]
(c) non-disposable towels (supplied by outside contract) [ ]
(d) a hot air hand-drying system [ ]
(e) combined washing and hand-drying recessed unit (sterile suite) [ ]
(f)

C Cleaning will be carried out:
(a) partially by domestic staff, working mainly in the
21C department and partially by unit teams working outside busy periods [ ]
(b) by domestic staff who work mainly in the department [ ]
(c) by unit domestic staff for main cleaning [ ]
(d) with a central cleaning team for wall washing and special cleaning [ ]
(e)

D Cleaning materials will be kept:
(a) at a cleaners' base, readily accessible to the whole department [ ]
(b)

4.16 COMMUNICATIONS AND OTHER ENGINEERING SERVICES

DEPARTMENT COMMUNICATION

Where an out-of-hours pharmacy service is organised, personal bleepers or other form of radiopaging equipment may be needed. Where a pharmacy serves another hospital which does not have its own department, facsimile transfer equipment may be required. Communication with computer equipment may require the use of exclusive telecommunication lines.

Earlier decision | Ref | 4.16 COMMUNICATIONS AND OTHER ENGINEERING SERVICES

A Telephone communication will be provided by:
(a) an appropriate PABX system with suitable barring (as Whole Hospital [ ]
(b) an appropriate PABX system with sub-switchboard [ ]
(c)

B Intercom will be provided:
(a) throughout the department [ ]
(b) for communication within the sterile suite [ ]
(c)

C Drinking water must be available:
(a) in the waiting area [ ]
(b) in the preparation areas [ ]
(c) in the seminar room [ ]
(d) in the staff room [ ]
(e)

D Heating will be required in all areas of the department:
(a) with the exception of the cool store [ ]
(b)

E Air cooling in the cool store will be provided:
(a) by mechanical means [ ]
(b) by natural means [ ]
(c)

F Mechanical ventilation will be provided in:
(a) internal rooms [ ]
(b) wash-up and autoclave areas [ ]
(c) toilets [ ]
(d) manufacturing areas [ ]
(e) dispensing areas [ ]
(f)

4.16 COMMUNICATIONS AND OTHER ENGINEERING SERVICES (contd)

Earlier decision	Ref	4.16 COMMUNICATIONS AND OTHER ENGINEERING SERVICES (contd.)
	A	A positive air pressure system with filtered and heated air will be required: (a) in the sterile suite [ ] (b)
	B	Supplies of water to the working areas of the department (other than hot and cold) will be: (a) distilled [ ] (b) demineralised [ ] (c)
	C	Demineralised water supplies will be supplied by: (a) external plant [ ] (b) cartridge equipment in the department [ ] (c)
	D	A steam supply will be required for the: (a) autoclave area [ ] (b)
12A	E	Remote plant will be provided: (a) for the refrigerated cabinets [ ] (b)

4.17 COMPUTER FACILITIES

USES OF COMPUTER EQUIPMENT

Although at the time of writing it is not clear how extensively computers may come to be used in hospital pharmacies, possible facilities for computer equipment and its integration with larger computer systems should be borne in mind, particularly when engineering requirements are being considered. Possible areas where computers could be used are stock control, container labelling, information storage and retrieval, production/quality control record or for calculation purposes. (HBN, para. 3.10)

Earlier decision | Ref

4.17 COMPUTER FACILITIES

A Computer facilities will be required for the following purposes:
(a) stock control and order processing [ ]
(b) label generation/data capture [ ]
(c) documentation/word processing purposes [ ]
(d) searching computer data bases for drug information [ ]
(e) dosage calculations [ ]
(f) statistical calculations [ ]
(g) integration of analytical equipment [ ]
(h)

5. GENERAL DESIGN REQUIREMENTS FOR THE DEPARTMENT

COMBINATION OF SUPPORT AND PRIMARY SERVICE

See HBN, Figure 8 for options

Earlier decision | Ref

5. GENERAL DESIGN REQUIREMENTS FOR THE DEPARTMENT

The following general design requirements supplement the requirements stated in the other sections of this document and the 'A' sheets.

A The design of the department should permit changes to be made in the balance of areas allocated to various functions, depending on scientific and technical advances in the pharmaceutical field.

B The overall size of the department may be influenced by the placing of areas which might be common to the main hospital, for example the external flammable stores and the pharmacy stores access.

C Security is of particular importance and must be regarded as a functional requirement in design and organisation policy.

D If bulk production activities are carried out in the department, a closer relationship should exist for this function to the stores rather than the dispensary area.

E Suitable access will be required for:
(a) delivery of goods by trolley from the delivery bay [ ]
(b) delivery of goods from the outlying pharmacy storage areas [ ]
(c) direct receipt of drugs from the external sources (see HM(70)1) [ ]
(d) despatch of drugs to wards and departments [ ]
(e) despatch of drug boxes, by road, to peripheral units [ ]
(f) collection of waste for disposal [ ]
(g) out-patients (possibly in wheelchairs) and escorts collecting prescriptions [ ]
(h)

F Access from outside should be limited and kept under supervision.

G Drug information support unit should be closely associated with a primary service pharmacy department.

H Manufacturing and assembly support services should be sited together to make common use of stores and be optimally provided with specific engineering services.

I Quality control support unit should be sited to have easy communication with manufacturing support units.

J Any purchase and distribution unit can be sited along with manufacturing and assembly support services.

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DESIGN BRIEFING SYSTEM

Part 2

This part of the document should be used when all the decisions in Part 1 have been completed, to select and record suitable activity spaces for the project. Whilst an activity space can be equated with a room, it may also be an unenclosed space such as a bay or corridor.

It is recommended that a sub-group of the planning team should select the activity spaces and related data sheets outside the main meeting so that sufficient time is available to thoroughly check the implication of planning decisions taken in Part 1.

COMPLETING PART 2

The activity spaces likely to be required have been divided into suitable groups of accommodation (e.g. SANITARY FACILITIES). References are provided in the "Earlier decision" column to decisions in Part 1 which may have an effect on the activity space chosen. Activity spaces are selected using the existing bank of D.H.S.S. activity data sheets ("A" sheets), which may require modification to suit particular projects, or new "A" sheets may be generated.

The reference letter and number of "A" sheets, from which a choice may be made, has been included (e.g. Disposal - Y0603). The number of activity spaces required should be entered in the "No." column. The "locational relationship" column should be used to state any important locational relationships within the department, either by ticking those already entered or adding new statements.

When all activity spaces have been chosen for each group, the whole of Part 2 should be reviewed in its entirety, to enable the planning team to rationalise any over-provision or reconsider areas that may be shared,e.g. sharing of facilities between sections of sub-departments.

The schedule of activity spaces and data sheets may be typed directly from the completed Part 2, including any guidance the team may decide to include to assist designers.

DESIGN BRIEFING SYSTEM

PHARMACY

Part 2

SCHEDULE OF ACTIVITY SPACES

The accommodation to be provided in the department is scheduled in the following groups of accommodation:

PRIMARY SERVICES - IN-PATIENT DISPENSING (450-600 beds)	50
PRIMARY SERVICES - IN-PATIENT DISPENSING (600-1,200 beds)	52
PRIMARY SERVICES - STERILE DISPENSING (small size)	54
PRIMARY SERVICES - STERILE DISPENSING (large size)	55
PRIMARY SERVICES - OUT-PATIENT DISPENSING	56
DRUG INFORMATION UNIT	57
SUPPORT SERVICES - STERILE MANUFACTURE	58
SUPPORT SERVICES - NON STERILE MANUFACTURE	60
SUPPORT SERVICES - ASSEMBLY	62
SUPPORT SERVICES - QUALITY CONTROL	63
SUPPORT SERVICES - PURCHASE AND DISTRIBUTION	64
RADIOPHARMACEUTICALS PREPARATION UNIT	66
ESSENTIAL COMPLEMENTARY ACCOMMODATION (ECA)	67
OPTIONAL ACCOMMODATION/SERVICES (OAS)	68

Planning unit/dept	Page	Design Briefing System	Decisions
PH	50	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR PRIMARY SERVICES - IN-PATIENT DISPENSING (450-600 BEDS) WILL INCLUDE:			
8D		DISPENSARY		Z0104	
7D		WARD SERVICE AREA		W0206	
		RETURNABLE BOX HOLDING STORE		W0210	
8E		CONTAINER WASH-UP		Z0107	
		GOODS RECEPTION/UNPACKING AREA		W0202	
		MAIN STORE		W0201	
12A,32 42E,43E		COOL STORE		W0204	
		SECURITY STORE		W0203	
		CONTAINER STORE		W0208	
		RETURNABLE EMPTIES STORE		W0211	
8A,B,C		EMERGENCY DRUG STORE		W0205	
36,37A		PRINCIPAL PHARMACIST'S OFFICE		M0521	
36,37A		STAFF PHARMACISTS' OFFICE		M0515	
36B,C.		CLERK/SECRETARIAL OFFICE		M1307	
39B		STOREKEEPER'S OFFICE		M1603	
36D,39A		PORTER'S BASE		M1707	

PHARMACY

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR PRIMARY SERVICES - IN-PATIENT DISPENSING (450-600 BEDS) WILL INCLUDE: (cont/d)			
41D		CLEANING SPACE		Y1504	
37		STAFF ROOM (8 PERSONS)		D0111	
38		STAFF CHANGING (2 x 8 PLACES)		V0417	
		STAFF WC		V1005	
42		SWITCHROOM		K0101	

Planning unit/dept	Page	Design Briefing System	Decisions
PH	52	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR PRIMARY SERVICES - IN-PATIENT DISPENSING (600-1,200 BEDS) WILL INCLUDE:			
		DISPENSARY		Z0105	
		WARD SERVICE AREA		W0206	
		RETURNABLE BOX HOLDING STORE *		W0210	
		CONTAINER WASH-UP		Z0107	
		GOODS RECEPTION/UNPACKING		W0202	
		MAIN STORE		W0207	
		COOL STORE *		W0204	
		SECURITY STORE		W0203	
		CONTAINER STORE *		W0208	
		RETURNABLE EMPTIES STORE		W0211	
		EMERGENCY DRUG STORE		W0205	
		PRINCIPAL PHARMACIST'S OFFICE		M0521	
		STAFF PHARMACISTS' OFFICE *		M0515	
		CLERK/SECRETARIAL OFFICE *		M1307	
39B		STOREKEEPER'S OFFICE		M1603	
		WITH AREAS MARKED * ENLARGED			

PHARMACY

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR PRIMARY SERVICES - IN-PATIENT DISPENSING (600-1,200 BEDS) WILL INCLUDE: (cont/d)			
36D,37C 39A		PORTER'S BASE		M1707	
41D		CLEANING SPACE *		Y1504	
37		STAFF ROOM (12 PERSONS)		D0112	
38		STAFF CHANGING (2 x 8 PLACES)		V0417	
		STAFF WC		V1005	
42		SWITCHROOM		K0101	
		WITH AREAS MARKED * ENLARGED			

Planning unit/dept	Page	Design Briefing System	Decisions
PH	54	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR STERILE DISPENSING SUITE (SMALL SIZE) WILL INCLUDE:			
9D		WASH/CHANGE/ROBE		Z0302	
9,43A		ASEPTIC ROOM		Z0303	
10A,B		SUPPORT ROOM		Z0201	

Planning unit/dept	Page	Design Briefing System	Decisions
PH	55	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR PRIMARY SERVICES - STERILE DISPENSING SUITE (LARGE SIZE) WILL INCLUDE:			
9C		SERVICE LOBBY		Z0202	
9D		WASH/CHANGE/ROBE		Z0302	
9D		ASEPTIC WASH/CHANGE		Z0301	
9,43A		ASEPTIC ROOM		Z0303	
		STERILE STORE/WEIGHING		Z0203	
10A,B		PREPARATION AREA		Z0204	
10C		FILLING AREA		Z0205	
		FINISHING AREA		Z0207	
10A,43D		STERILIZER ROOM		Z0206	

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR OUT-PATIENT DISPENSING (ATTACHED LOCATION) WILL INCLUDE:			
7		WAITING AREA		Z0101	
		INTERVIEW CUBICLE		M0709	
		OUT-PATIENT SERVICE COUNTER		Z0102	
		THE FACILITIES TO BE PROVIDED FOR OUT-PATIENT DISPENSING (REMOTE UNIT) WILL INCLUDE:			
		WAITING AREA		Z0101	
		INTERVIEW CUBICLE		M0709	
		OUT-PATIENT SERVICE COUNTER		Z0102	
		OUT-PATIENT DISPENSARY		Z0103	

PHARMACY

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR DRUG INFORMATION UNIT (HOSPITAL LEVEL) WILL INCLUDE:			
17		TECHNICAL INFORMATION ROOM		Z0702	
		THE FACILITIES TO BE PROVIDED FOR DRUG INFORMATION UNIT (DISTRICT CENTRE) WILL INCLUDE:			
18		MAIN INFORMATION WORK AREA		Z0703	
18C		QUIET STUDY AREA		H1002	
18B		LITERATURE STORE		W0238	
		PHARMACIST'S OFFICE		M0522	

Planning unit/dept	Page	Design Briefing System	Decisions
PH	58	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR STERILE MANUFACTURE WILL INCLUDE:			
		STILL ROOM		Z0506	
		INGREDIENT WEIGHING		Z0402	
		CONTAINER UNPACKING			
		CONTAINER PREPARATION		Z0403	
		WASH/CHANGE/ROBE		Z0302	
		PREPARATION AREA		Z0404	
		ASEPTIC PRE-PREPARATION AREA		Z0401	
		EQUIPMENT CLEANING		Z0407	
		CLEAN EQUIPMENT STORE		W0232	
		FILLING AREA		Z0405	
		TRANSFER HATCH		Z0406	
20D		ASEPTIC WASH/ROBE		Z0301	
		ASEPTIC EQUIPMENT STORE		Z0304	
43A		ASEPTIC ROOMS		Z0303	
22,43D		STERILIZATION LOADING/COOLING		Z0408	
		STERILIZER MAINTENANCE AREA		Z0409	

PHARMACY

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR STERILE MANUFACTURE WILL INCLUDE: (cont/d)			
23A		LABEL PREPARATION STORE		Z0511	
		CONTAINERS STORE		W0233	
		MATERIALS STORE		W0228	
23C		QUARANTINE STORE		W0234	
23D		FINISHED PRODUCTS STORE		W0235	
36A,37A		PHARMACIST'S OFFICE		M0520	
37,38		STAFF ROOM (12 PERSONS)		D0112	
41D		CLEANING SPACE		Y1504	
38		STAFF CHANGING (12 PLACES)		V0427	
		STAFF WC		V1005	
42		SWITCHROOM		K0101	

Planning unit/dept	Page	Design Briefing System	Decisions
PH	60	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR NON-STERILE MANUFACTURE WILL INCLUDE:			
25		CONTAINER PREPARATION		Z0508	
		INGREDIENT WEIGHING		Z0501	
		DRY PRODUCTS AREA		Z0502	
24A,25B		LIQUID PRODUCTS AREA		Z0504	
25D		OINTMENTS AND CREAMS AREA		A0503	
		DISINFECTANTS AREA		Z0507	
24C,D, 25E		HAZARDOUS DRY PRODUCTS AREA		Z0509	
		FINISHING AREA		Z0516	
25B,C		EQUIPMENT CLEANING		Z0510	
		CLEAN EQUIPMENT STORE		W0226	
		MATERIALS STORE		W0229	
26D,E		QUARANTINE STORE		W0223	
24D		FINISHED PRODUCTS STORE		W0230	
		RETURNABLE EMPTIES STORE		W0224	
24E		CONTAINERS STORE		W0222	

PHARMACY

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR NON-STERILE MANUFACTURE WILL INCLUDE: (cont/d)			
		PHARMACIST'S OFFICE		M0520	
37,38		STAFF ROOM (8 PERSONS)		D0111	
41D		CLEANING SPACE		Y1504	
38		STAFF CHANGING (8 PLACES)		V0426	
		STAFF WC		V1005	
42		SWITCHROOM		K0101	

Planning unit/dept	Page	Design Briefing System	Decisions
PH	62	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR ASSEMBLY WILL INCLUDE:			
		CONTAINER PREPARATION		Z0518	
27A		PACK/REPACK AREA		Z0514	
27D,28A		TABLET PACKING AREA		Z0512	
		EQUIPMENT CLEANING		Z0517	
28		FINISHING AREA		Z0516	
28B		MATERIALS STORE		W0227	
27E		CONTAINERS STORE		W0222	
		CLEAN EQUIPMENT STORE		W0213	
28F,G		PACKED PRODUCTS STORE		W0231	
		PHARMACIST'S OFFICE		M0520	
		STAFF ROOM (6 PERSONS)		D0110	
41D		CLEANING SPACE		Y1504	
38		STAFF CHANGING (6 PLACES)		V0425	
		STAFF WC		V1005	
42		SWITCHROOM		K0101	

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE FACILITIES TO BE PROVIDED FOR QUALITY CONTROL WILL INCLUDE:			
		WEIGHING FACILITY		Z0607	
29		CHEMICAL TESTING LABORATORY		Z0601	
		INSTRUMENT LABORATORY		Z0602	
		REFERENCE SAMPLE STORE		W0212	
		OFFICE/SAMPLE RECEPTION		Z0606	
		COMPUTER FACILITIES		M0401	
		CLEANING SPACE		Y1504	
		STAFF ROOM (6 PERSONS)		D0110	
		STAFF CHANGING (6 PLACES)		V0425	
		STAFF WC		V1005	
		SWITCHROOM		K0101	

Planning unit/dept	Page	Design Briefing System	Decisions
PH	66	PHARMACY	

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship	✓
		THE FACILITIES TO BE PROVIDED FOR THE RADIOPHARMACEUTICALS PREPARATION UNIT (CLOSED PROCEDURES) WILL INCLUDE:				
34		STAFF CHANGE/ROBE		Z0805		
		SUPPORT ROOM		Z0804		
33,34 35		CLOSED PROCEDURES ROOM		Z0802		
		THE FACILITIES TO BE PROVIDED FOR RADIOPHARMACEUTICALS PREPARATION UNIT (OPEN PROCEDURES) WILL INCLUDE:				
		STAFF CHANGE/ROBE		Z0805		
		CLEANING BAY				
34,35		PREPARATION/SUPPORT ROOM		Z0803		
		ASEPTIC WASH/ROBE		Z0806		
		ASEPTIC ROOM		Z0801		
		PHARMACIST'S OFFICE		M0514		
		STAFF ROOM (3 PERSONS)				
		STAFF WC		V1005		
42		SWITCHROOM		K0101		

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE ESSENTIAL COMPLEMENTARY ACCOMMODATION (ECA) REQUIRED WILL INCLUDE:			
		SEMINAR ROOM (8 PERSONS)		H0509	
17,18D,C 38D,E		SEMINAR ROOM (20 PERSONS)		H0508	
		FLAMMABLES STORE		W0209	
		MEDICAL GAS CYLINDERS STORE		W0239	
18F,44		COMPUTER FACILITIES		M0403	
		IN-PROCESS CONTROL LABORATORY		Z0106	
		STILL ROOM		Z0505	
36D,37C		PORTER'S BASE		M1707	
		GOODS RECEPTION/LOADING BAY		W0218	
		FLAMMABLE/HAZARDOUS LIQUID FILLING AREA		Z0515	
		REFUSE COLLECTION STORE		W0219	
		LABORATORY WORKSHOP		Z0605	
		MICROBIOLOGICAL TESTING SUITE		Z0603/4	
		CYTOTOXIC PREPARATION ROOM			

Decisions

Earlier decision	Ref	Activity Space	No.	A sheet	Locational relationship
		THE OPTIONAL ACCOMMODATION/SERVICE (OAS) REQUIRED WILL INCLUDE:			
36,37		GENERAL OFFICE/REPROGRAPHIC SERVICES		M1016	
		TABLET PACKING LINE		Z0512	
		ENGINEER'S OFFICE/MANUFACTURING SERVICES			

EXAMPLES OF WAYS IN WHICH A SECTION OF A BRIEF COULD BE TYPED FROM THE OPTIONS PAGE ABOVE

Options selected - typed directly from DBS page 15

4.4 DISTRIBUTION

A. The pharmacy distribution service will cover:
   (a) the out-patients department
   (b) the wards
   (c) the accident and emergency department
   (d) diagnostic departments

B. Controlled drugs and drugs requiring security will be:-
   (a) despatched in locked containers from the returnable box holding store

C. This will be via:
   (a) the main hospital corridor to on-site wards and departments.

D. Common stocks of pharmacy supplies (lotions disinfectants, etc.) will be issued to wards and departments:
   (b) by a topping up system

E. Drugs will be supplied to wards and departments:
   (b) by a topping up system

Options selected - narrative form:

4.4 DISTRIBUTION (cont'd)

The pharmacy distribution service will cover the out-patients department, the wards, the accident and emergency department and the diagnostic departments. 15A

Controlled drugs and drugs requiring security will be dispatched in locked containers from the returnable box holding store, and this will be via the main hospital corridor to on-site wards and departments. 15B/C

Common stocks of pharmacy supplies (lotions, disinfectants, etc.) will be issued to wards and departments by a topping up system. 15D

Drugs will be supplied by a topping up system (see paragraph 3.39 of the Health Building Note No. 29, Pharmacy). 15E

4.4 DISTRIBUTION

DISTRIBUTION SYSTEM

The distribution of medicines for wards and departments will be in accordance with the hospital policy and may be a stock checking system, a topping-up system, one-for-one exchange, or issue against stock requisitions. There may be a separate issue system for medicines dispensed against the patients' prescription cards. Bulk supplies of commonly used intravenous fluids, disinfectants, lotions, etc. may be distributed similarly.

WARD SERVICE AREA

Local policy may decide that in the interests of staff efficiency the routine of ward servicing should utilise a 'picking' system for items such as pre-packs. One arrangement would be to select these items directly from the main pharmacy store, but speedier 'picking' can be achieved by establishing a separate holding area for such items. Wards would then be supplied with stock either on the basis of requisitions or by a pharmacy operated 'topping up' service. With such a service the ward staffs' involvement in ordering medicines is reduced as the pharmacy staff check ward stocks against an agreed stock list and 'top up' the used items to the agreed levels. (see HBN, Figure 5) (HBN, para. 4.39)

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Earlier decision	Ref	4.4 DISTRIBUTION
	A	The pharmacy distribution service will cover: (a) the out-patients department [✓] (b) the wards [✓] (c) the accident and emergency department [✓] (d) diagnostic departments [✓] (e) day hospitals on site [ ] (f) peripheral units: (SPECIFY) - - - (g) health centres (SPECIFY) - - - (h)
	B	Controlled drugs and drugs requiring security will be: (a) dispatched in locked containers from the returnable box holding store [✓] (b)
	C	This will be via: (a) the main hospital corridor to on-site wards and departments [✓] (b) the external goods entrance to peripheral units [ ] (c)
	D	Common stocks of pharmacy supplies (lotions, disinfectants, etc.) will be issued to wards and departments: (a) by a stock checking system [ ] (b) by a topping-up system [✓] (c) by a standing order [ ] (d) by one-for-one exchange (full for empty) [ ] (e) by ward requisition [ ] (f)
	E	Drugs will be supplied to wards and departments: (a) by a stock checking system [ ] (b) by a topping-up system [✓] (c) by requisition [ ] (d) against patients' prescription cards [ ] (e) in unit doses [ ] (f) picked from stocks reserved for ward service [ ] (g)

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